

Multi-channel Fiber Polarization Controller

Product Overview

The Phoenix multi-channel polarization controller is part of the FireBird instrumentation range and provides for polarization state adjustment simultaneously in multiple fiber lines within a single instrument. Available in standard bench top or 19" rack configuration the controller offers the option of up to 4 channels with full microprocessor control. Based on the popular Phoenix Photonics all-fiber polarization controller/scanner, this instrument offers the option of three waveplate manual control for each channel or external pc control.

The instrument has USB and RS 232 standard input with optional GPIB and Ethernet. Each controller has three fiber variable waveplates to provide full Poincaré sphere coverage converting any arbitrary input state of polarization to any output state. Each waveplate can be independently set to scan with sine, square or ramp input or set to random 'scrambling' mode.

8 Channel 2U 19" Rack Version



4 Channel Bench-top Version



Features & Applications

FEATURES

- Electronic and manual polarization control
- Simple operation
- Any output SOP achievable
- Low insertion loss
- High return loss
- High extinction ratio maintenance

APPLICATIONS

- Polarization control
- State of polarization scanning
- Component testing
- Sensor systems
- Optical fiber polarimetry
- PMD emulation



For more information please contact Phoenix sales:
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SPECIFICATION	Units	Each fiber channel
Wavelength range	nm	980-1080: 1280-1350: 1510-1620
Insertion Loss ¹	dB	<0.5
PMD	ps	<0.15
Insertion loss variation ²	dB	<0.05
Return Loss ¹	dB	>55
Operating Temperature Range	°C	0 to 50
Storage Temperature	°C	-40 to +85
Number of channels		Select 1 to 4
Scanning mode		Sine, Triangle, Square, Random
Parameter setting		Minimum/maximum voltage, waveform period, asymmetric square and triangle wave.
Communication interface		USB and RS232
Optional additional interface		GPIB, Ethernet
PC control		Software for individual waveplate control
Manual switch		Manual front panel control
External trigger		Input/output trigger
Power		External mains 110V to 240V

Specification Notes

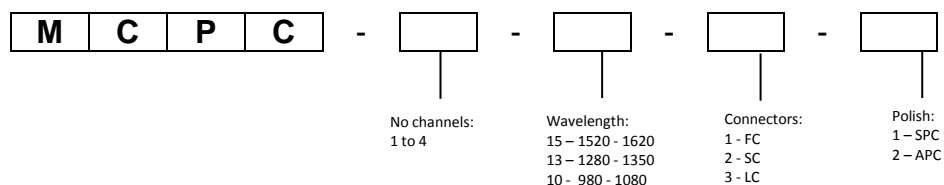
- Losses do not include connectors.
- The variation of output power for full coverage of the Poincaré Sphere.

Dimensions

All dimensions are approximate and may vary slightly. Front panel layout may vary according to connector type selection.

Width:	230mm
Height:	85mm
Depth:	190mm

Ordering Information



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